UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

July 1962

Part II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

CONTENTS

	Page
Errata	2
Notice of Publications	2
Radio Broadcasts to Albacore Fleet	2
Preliminary Report of Early Season Albacore Catches	3
Sea Surface Temperature Charts, Eastern Pacific Ocean, July 1962	5

Bureau of Commercial Fisheries
Biological Laboratory
P. O. Box 6121, Pt. Loma Station
San Diego 6, California

* Part I - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

ERRATA

PAGE 7, FIGURE 4.--Sea Surface Temperature Charts, Eastern Pacific Ocean, June 1962. Delete sea temperatures enclosed by latitude 0° to 10° N. and longitude 110° W. to 120° W.

NOTICE OF PUBLICATIONS

Reprints of the following articles may be obtained by writing to our San Diego address:

"The 1960 Pre-season Albacore Survey in the Northeastern Pacific Ocean" by William H. Craig of the California Department of Fish and Game and Robert H. Caneday of the U.S. Bureau of Commercial Fisheries, published in the July 1962 issue of California Fish and Game.

"Sea Temperatures and the Availability of Albacore off the Coasts of Oregon and Washington" by James H. Johnson of the U.S. Bureau of Commercial Fisheries, published in the July 1962 issue of Transactions of the American Fisheries Society.

RADIO BROADCASTS TO ALBACORE FLEET

One important task of the Tuna Forecasting Program of the U.S. Bureau of Commercial Fisheries Biological Laboratory, San Diego is to provide operational information to the tuna fishing fleets. Sea surface temperature and topographic charts are examples of the type of information so far made available. We have recently instituted a radio reporting service for the albacore fleet, for a trial period, to provide information on a current basis which may be useful to fishermen. Daily broadcasts on frequency 4415.8 kc. at 1100 and 2000 Pacific Daylight Time are in effect from Radio Station WWD located at Scripps Institution of Oceanography. Information given on these broadcasts includes latest sea temperatures for selected areas such as Guadalupe, Showboat, San Juan, Davidson, etc., latest reports from Navy picket vessels, from Bureau owned research vessels the Black Douglas and John N. Cobb, from any vessels under charter to the Bureau, and from cooperating organizations including the California Department of Fish and Game, and the Fish Commission of Oregon.

Ten albacore boats also have radios equipped with the transmitting crystal 4415.8 kc. which permits their masters to contact WWD directly to relay sea temperature data and other information pertinent to fishing operations. If the program proves successful this year, in that we receive good cooperation from the fleet and the broadcasts show definite indications of being useful to fishermen, we will encourage more boat owners to install this crystal in their radios to join in this program. Authorization to use frequency 4415.8 kc. may be obtained from this office.

PRELIMINARY REPORT OF EARLY SEASON ALBACORE CATCHES

Knowledge of location of early season albacore catches is important to commercial fishermen to enable them to plan fishing operations more efficiently. Early season catches this year were made by research vessels specifically scouting for albacore, by vessels engaged in oceanographic research but fishing for albacore incidentally, and by U.S. Navy picket vessels. Reports of these catches were broadcast daily to the albacore fleet on fishing frequencies by research vessels and the use of Radio Station WWD, described in an accompanying article, further facilitated the circulation of the information.

The purpose here is to provide a preliminary summary of the albacore catches that the several research vessels made during May, June, and July. Catches of the albacore troller Polly Ann under charter to the Bureau in July are not included. Conclusions should not be drawn as to the relative abundance of albacore from one region to another because fishing effort was not uniform.

The first albacore of the season was taken on May 27 by N. B. Scofield of the California Department of Fish and Game at latitude 27°15' N. and longitude 122°45' W., Figure 1. Sea temperature at time of catch was 64.4° F. Subsequently catches by Scofield and Black Douglas during the first two weeks of June were in the general area west of Guadalupe Island, Figure 1. During the last half of June Black Douglas operated in the area from Guadalupe to San Benitos, Pt. Colnett, and San Juan Seamount. Maximum catches were made 30 to 50 miles south of San Juan Seamount, Figure 1. Although the temperature chart upon which these catches are superimposed shows 60° F. water in this area, there was, in fact, a cold streak of water, 56°-58° F., running over the seamount and immediately to the south. It was in this cold water the albacore were taken. Picket vessels operating about four hundred miles west of Pt. Conception and Cape Mendocino were reporting good catches for the last half of June. Best catches were made at 40° N., 133° W.

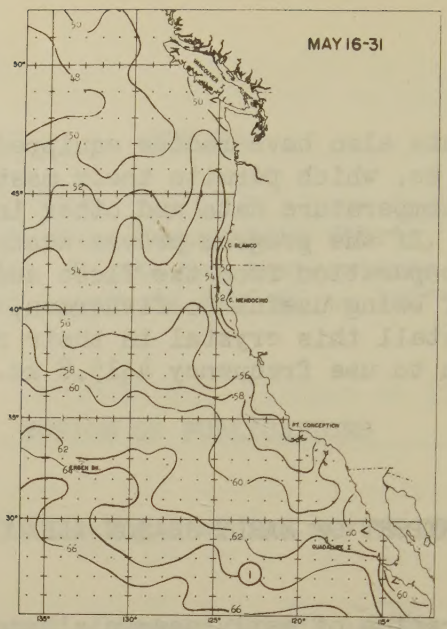
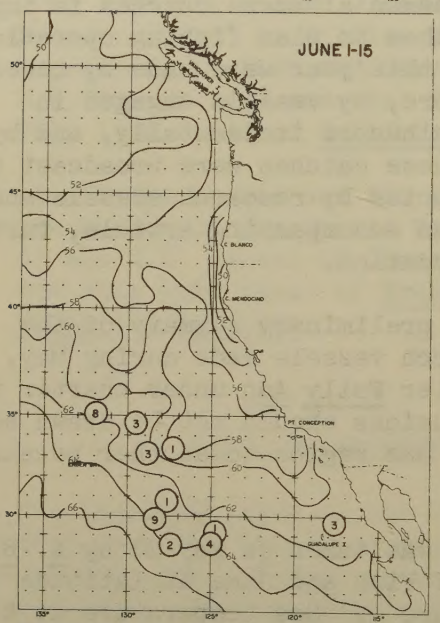
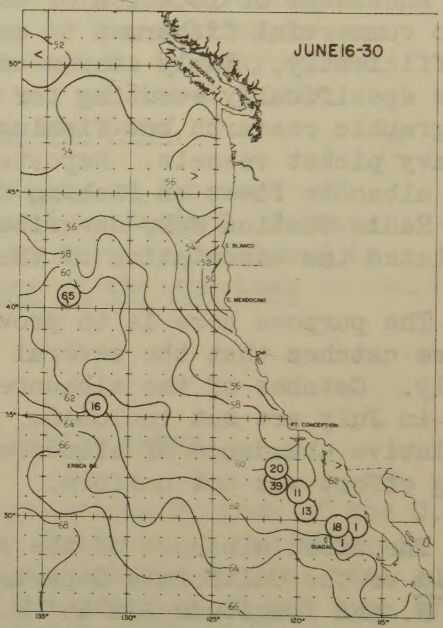
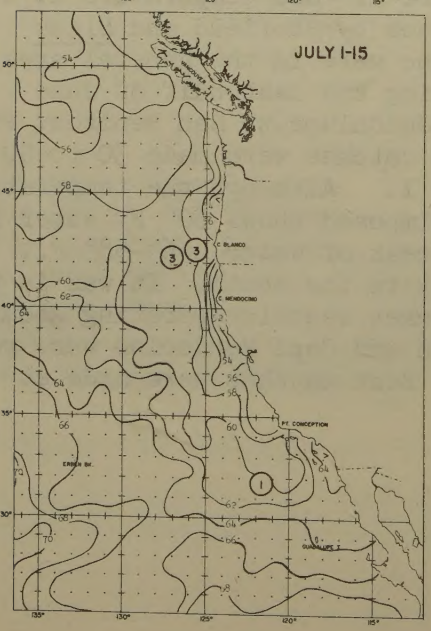
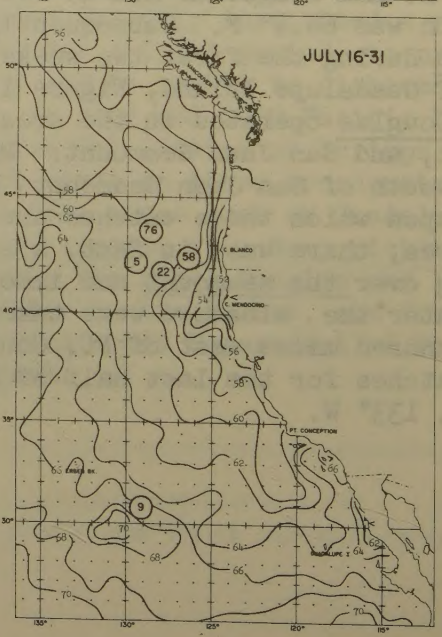


FIGURE 1.--Early season albacore catches by 15-day period made by research vessels and U.S. Navy picket vessels. Numerals enclosed by circles are numbers of albacore taken.









First catches of the season off Oregon-Washington were reported on July 5 by Sandra Lee, under charter to the Fish Commission of Oregon, at 42°16' N. and 127°00' W. in water temperature of about 59° F. Preliminary reports from the Bureau's research vessel John N. Cobb indicate heavy concentrations of albacore during the last half of July in the general region 42°-44° N., 125°-129° W. in water temperatures 58° to 61° F.

Final reports on the above mentioned surveys will be forthcoming at later dates. Notices of publication will be announced in this monthly journal and interested parties may receive reprints on request.

James H. Johnson
Chief, Tuna Forecasting Program

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN JULY 1962

Acknowledgments

The following organizations and stations contributed data for the July 1962 charts:

U. S. Weather Bureau, San Diego, California
U. S. Weather Bureau Ship Visitation Office, Long Beach, California
U. S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U. S. Navy Branch Hydrographic Office, Honolulu, Hawaii; Seattle, Washington; San Francisco and Wilmington, California
U. S. Coast Guard, Port Hueneme Light Station, Port Hueneme, California
U. S. Bureau of Commercial Fisheries, Biological Laboratories, Honolulu, Hawaii; La Jolla, California; Seattle, Washington
U. S. Bureau of Commercial Fisheries, Exploratory Fishing and Gear Research Base, Seattle, Washington
Fish Commission of Oregon
Guadalupe Island, Coronado Island, Ensenada, Cedros Island and Almejas Bay by Pedro Mercado of the Universidad Autonoma de Baja California, Ensenada, Mexico

Hopkins Marine Station, Pacific Grove, California by J. P. Balesteri

Inter-American Geodetic Survey by Rene Cortes at Salina Cruz, Mexico; David Ortega at Manzanillo, Mexico; Romeo Valencia at Pt. San Jose, Guatemala; D. Reyes at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; Gualberto Tapia at San Cristobal, Galapagos; R. Gomez at La Libertad, Ecuador; L. Mesa at Talara, Peru

Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California

Kelco Company, San Diego, California

Oregon State University by Bruce Wyatt

Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by R. W. Collins at Quatsino Lightstation; G. J. Skinner at Cape St. James Light; B. Stuart at Amphitrite Point Light; J. M. Hartt at Langara Island Light

Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein

Ships Sportfisher IV, Santa Maria, Unga, Polly Ann, New Sunset, and Santa Anita

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperatures at weather-ship stations. Numerals on shore are temperatures at coastal and light stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term mean charts of H.O. 225. Hatched areas are colder than mean.

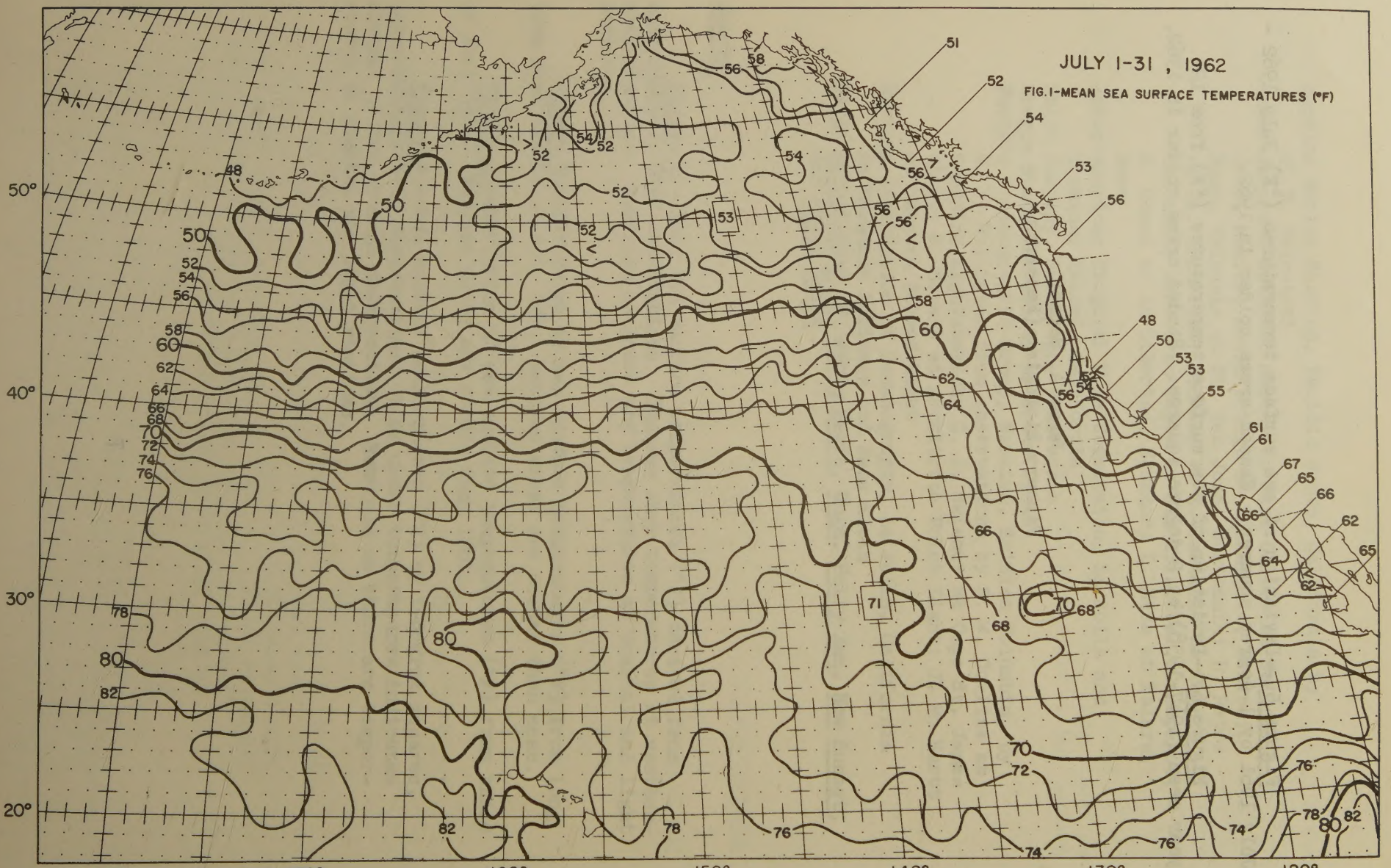
Figure 3.--Deviation of sea surface temperatures (°F) from those of July 1961. Hatched areas are colder than 1961.

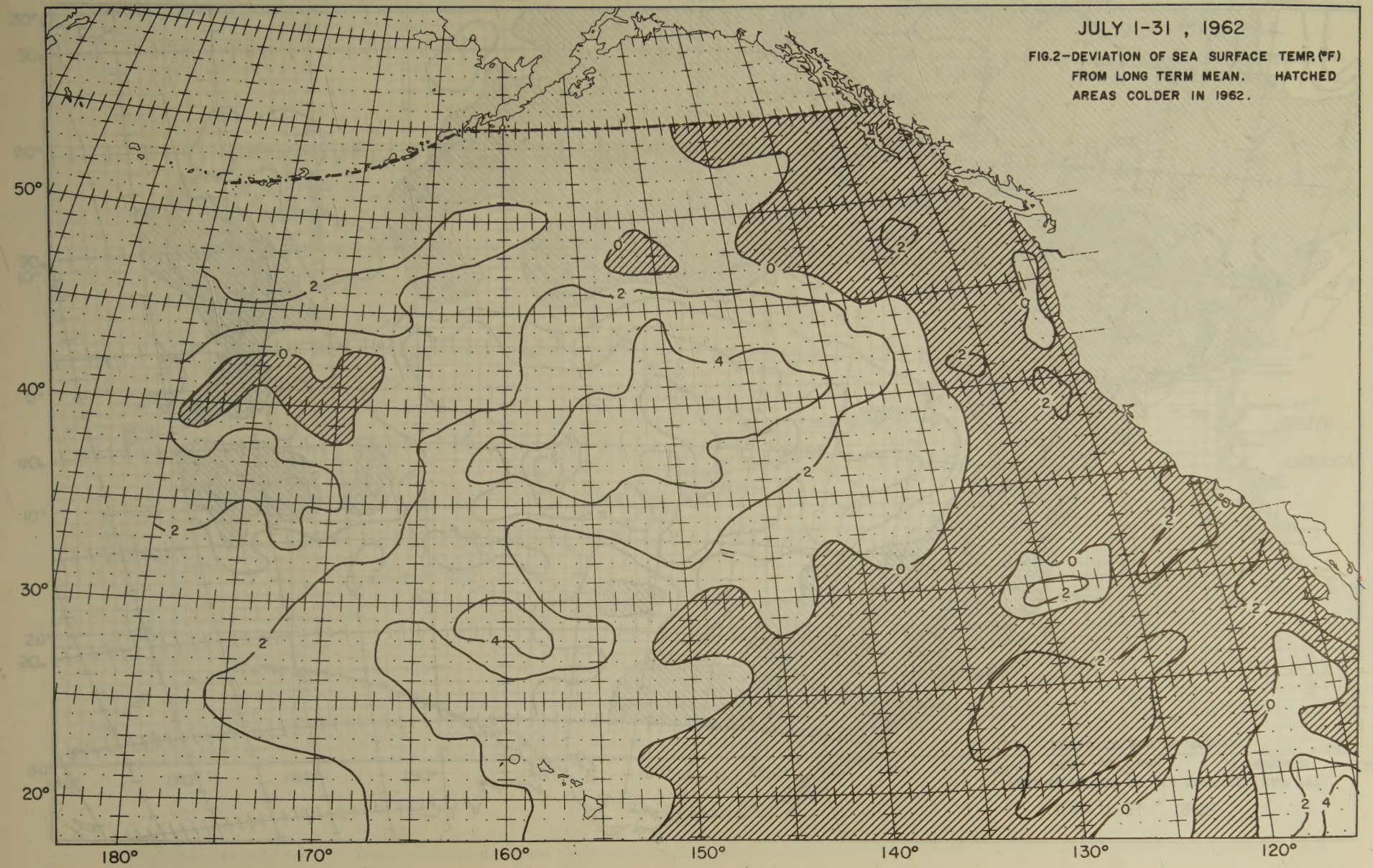
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal and light stations.

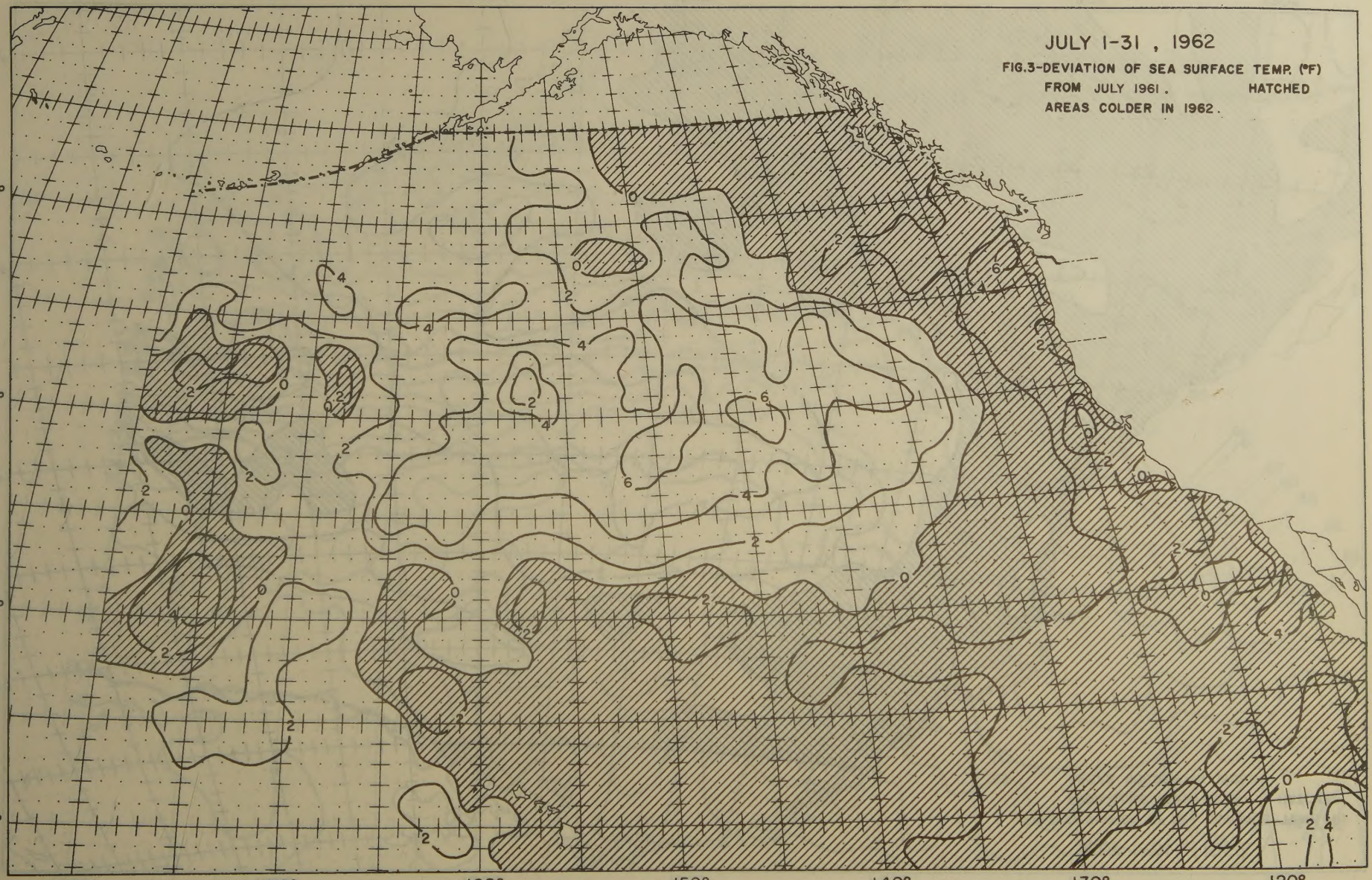
Figure 5.--Deviation of sea surface temperatures (°F) July 1962 - July 1961 by 1-degree squares. Shaded areas colder in 1962.

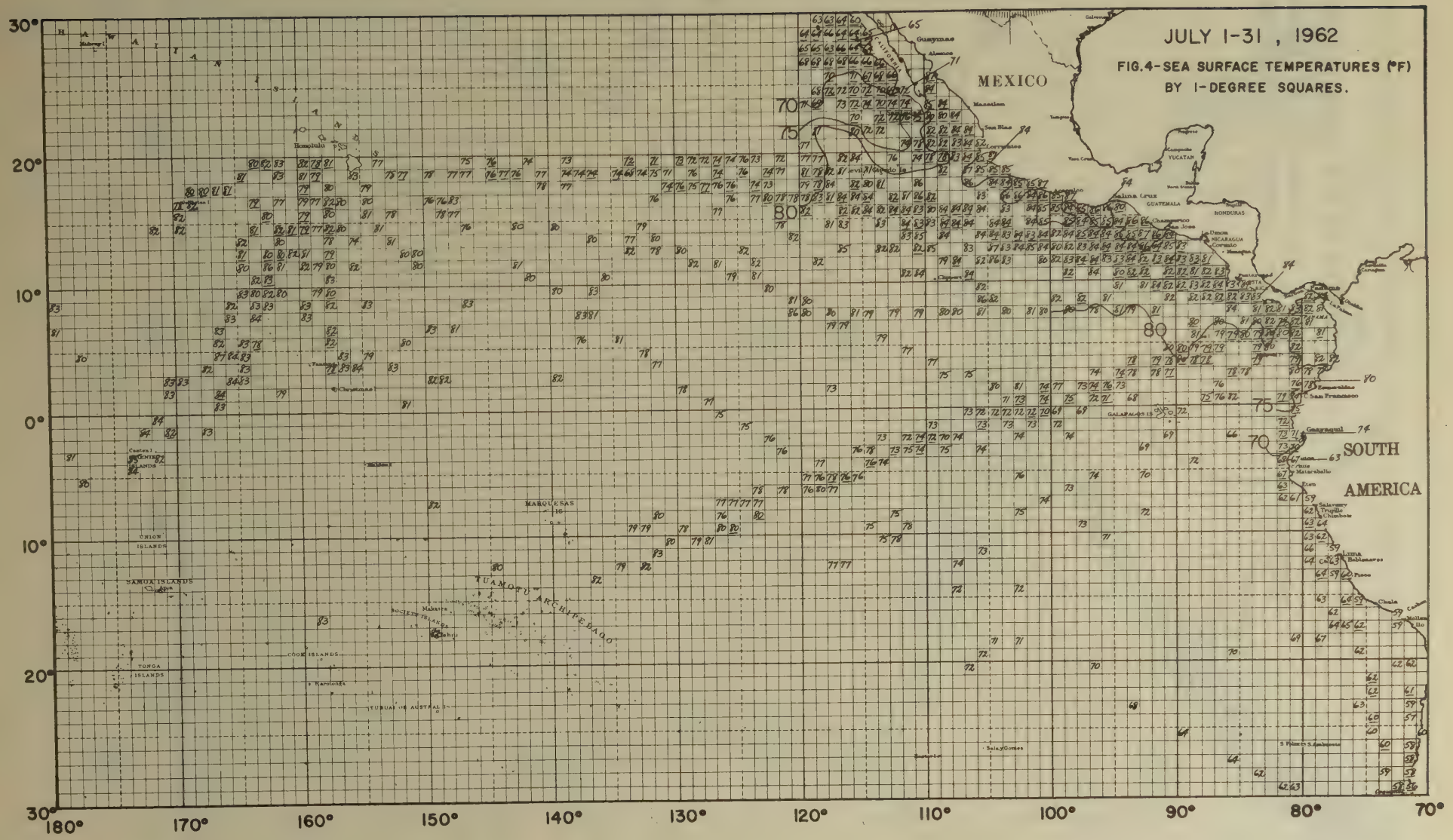
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas colder in 1962.

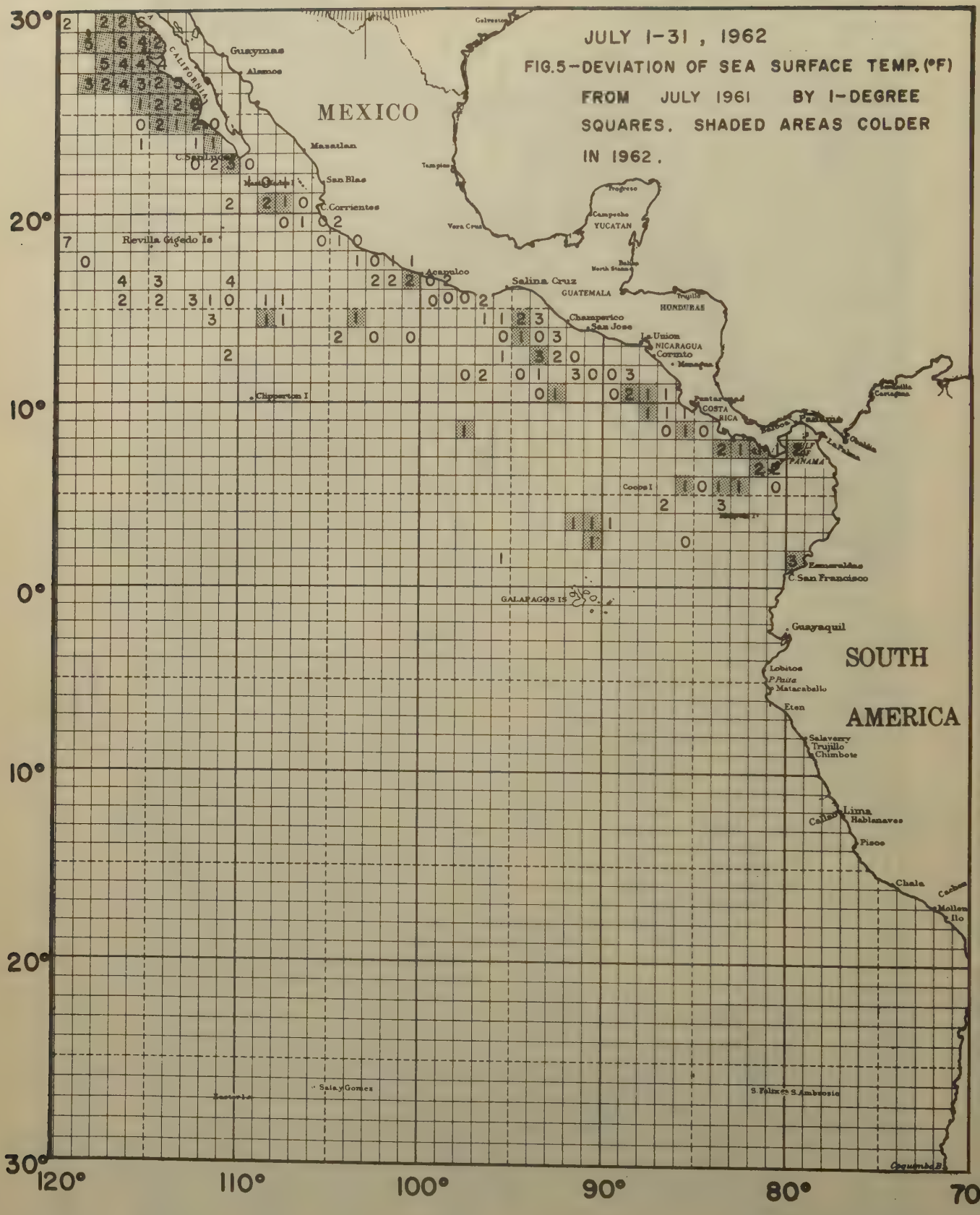
James A. Renner
Fishery Biologist (Research)

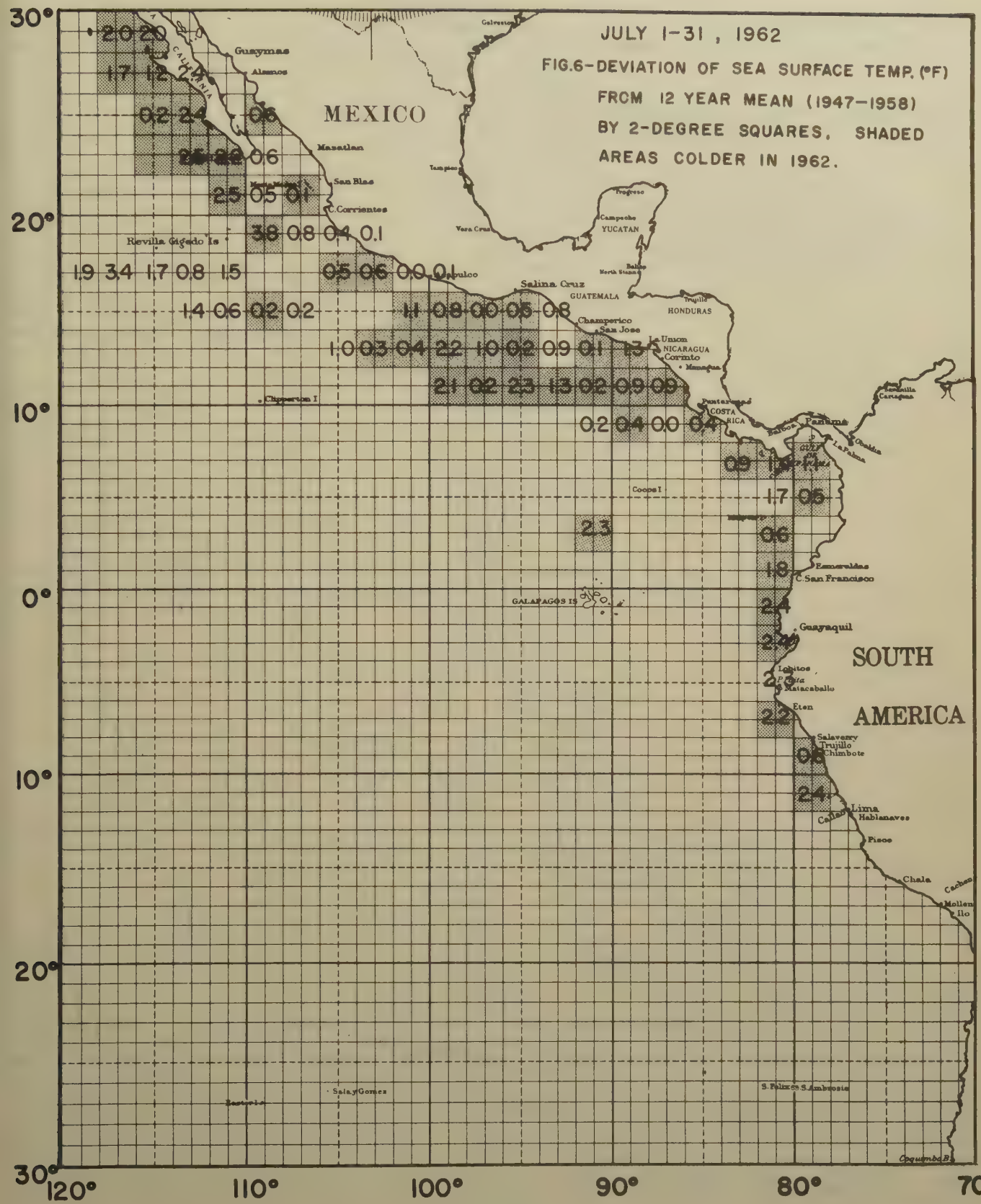

JULY 1-31 , 1962
FIG.1-MEAN SEA SURFACE TEMPERATURES (°F)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

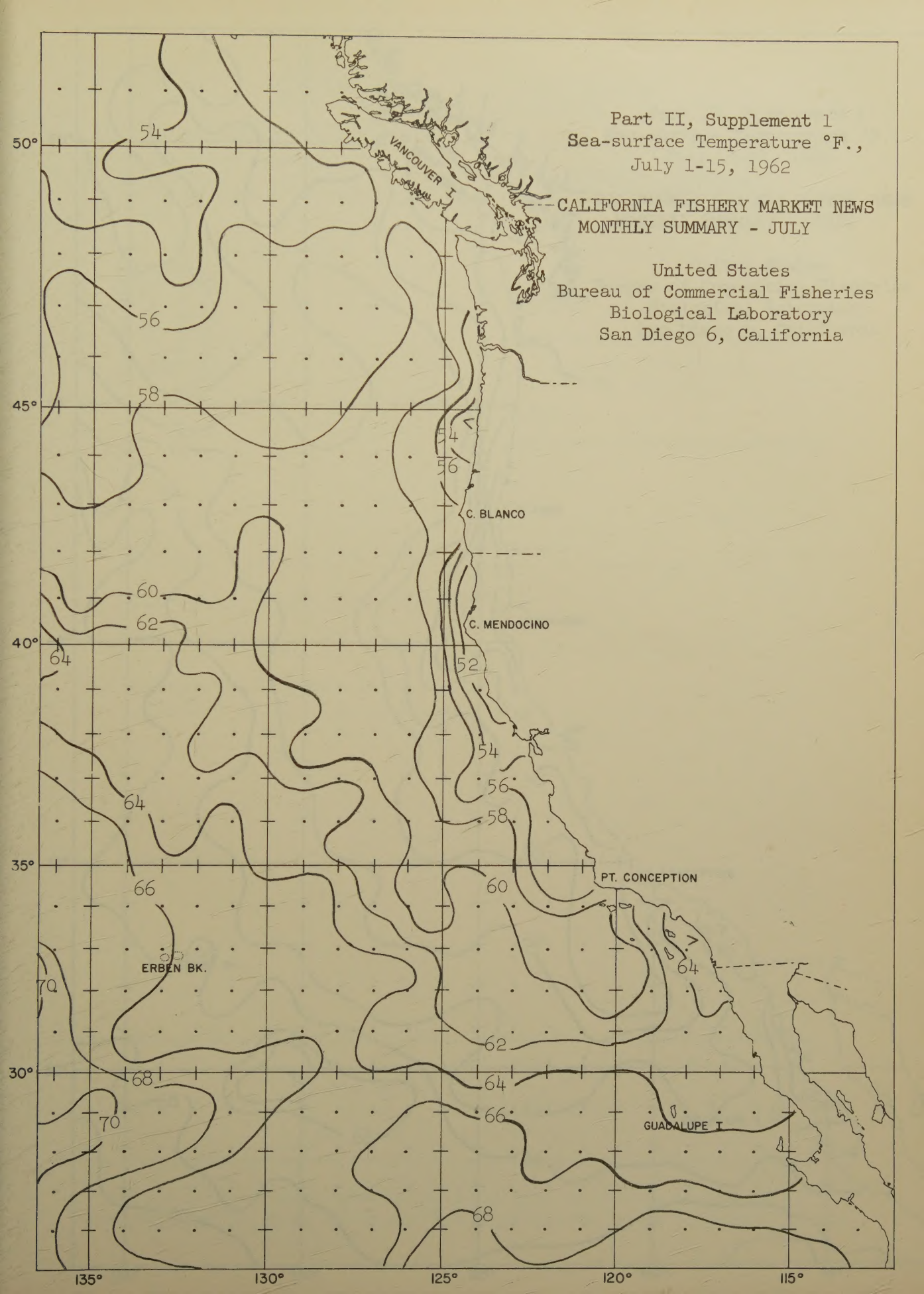

JULY 1-31 , 1962
FIG.2-DEVIATION OF SEA SURFACE TEMP.(°F) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1962.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

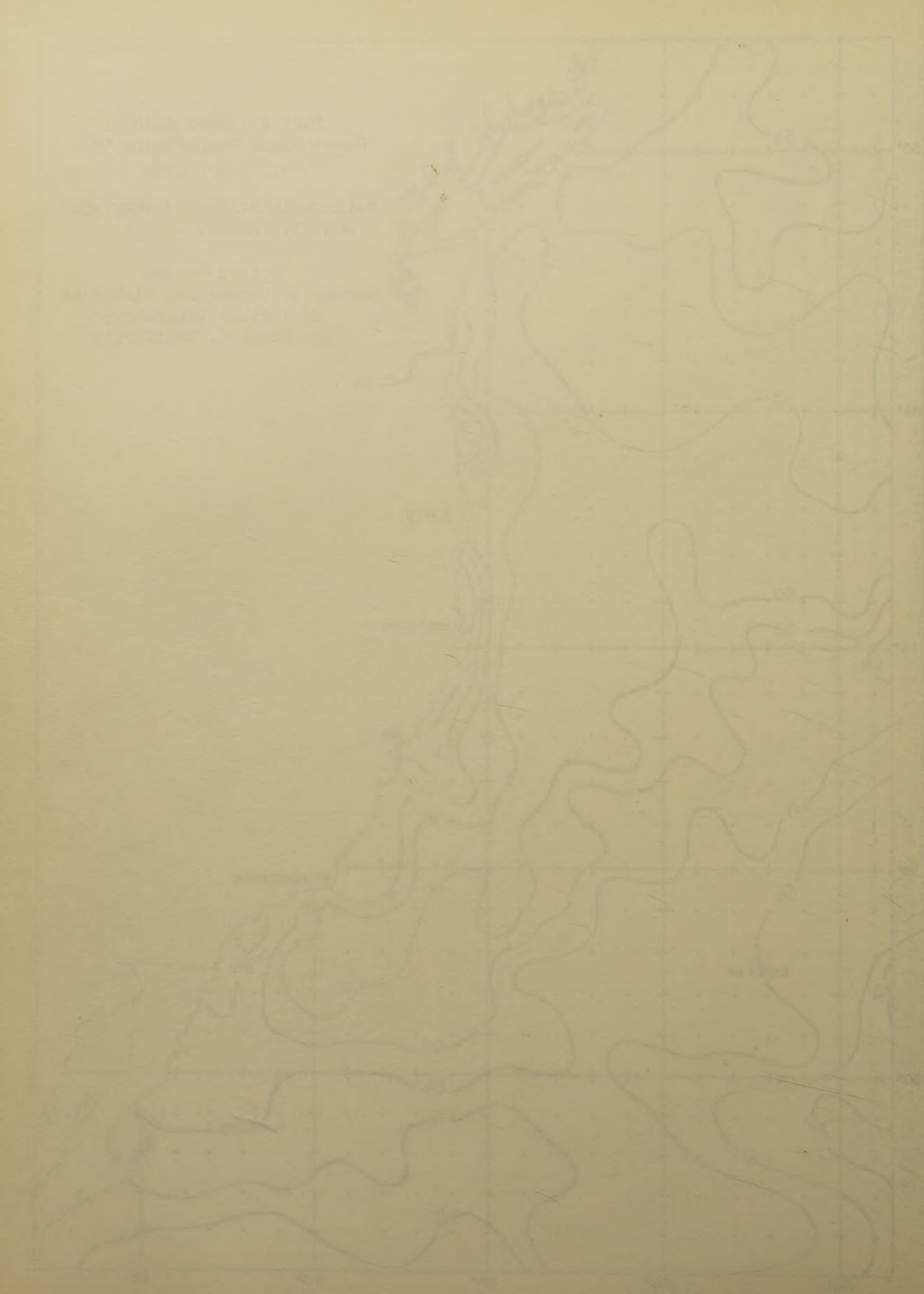

JULY 1-31 , 1962
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F)
FROM JULY 1961 . HATCHED
AREAS COLDER IN 1962.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

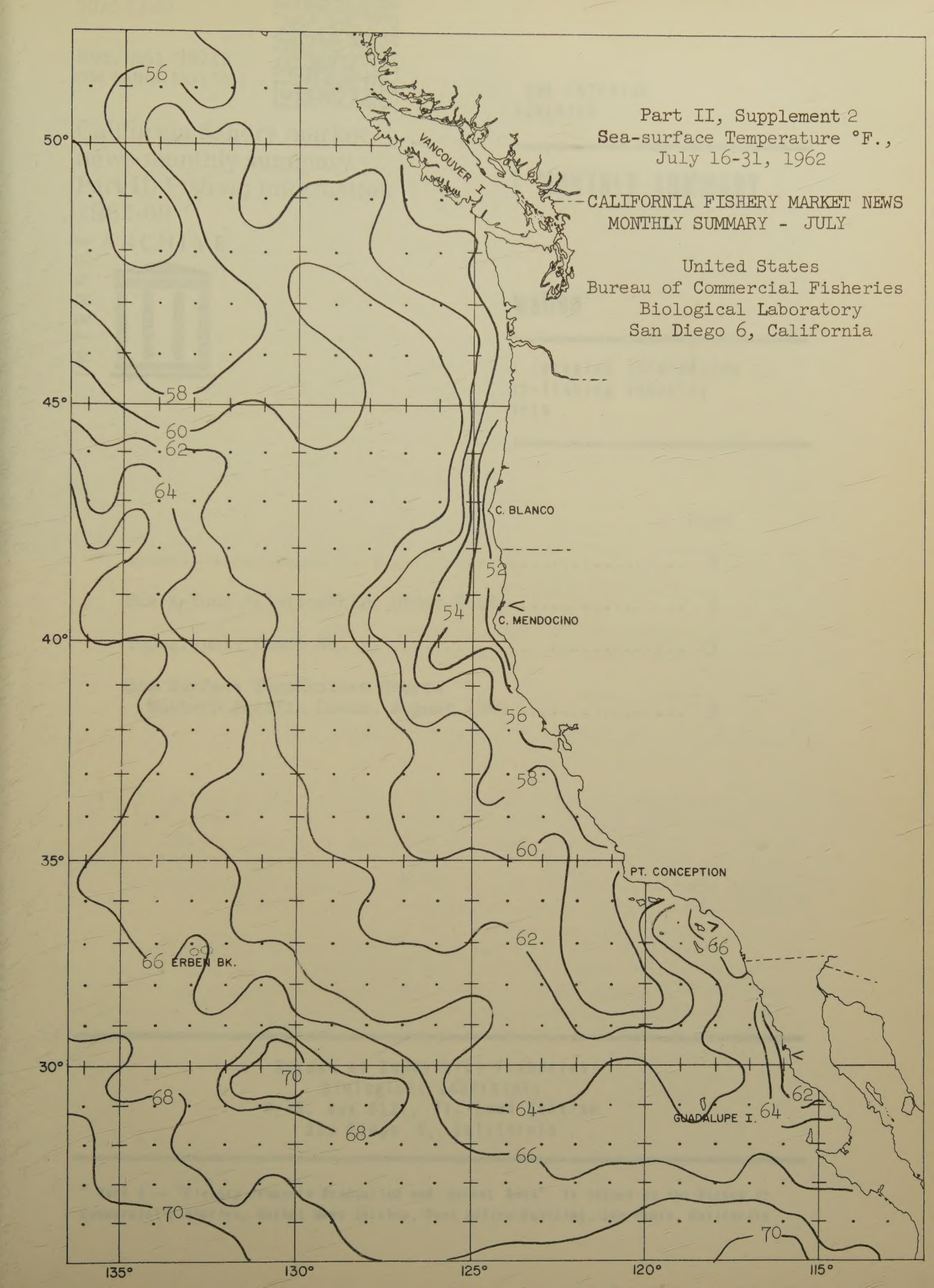

JULY 1-31 , 1962
FIG.4-SEA SURFACE TEMPERATURES (°F)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
HAWAIIAN ISLANDS
Honolulu
MARQUESAS
TUAMOTU ARCHIPELAGO
UNION ISLANDS
SAMOA ISLANDS
TONGA ISLANDS
COOK ISLANDS
SOCIETY ISLANDS
Tahiti
Makatea
Raroia
GALAPAGOS IS.
Guaymas
Mazatlan
Salina Cruz
GUATEMALA
HONDURAS
NICARAGUA
Corinto
Guayaquil
Salaverry
Trujillo
Chimbote
LIMA
Callao
Pisco
Chala
Mollendo
Ilo
30°
20°
10°
0°
10°
20°
30°
180°
170°
160°
150°
140°
130°
120°
110°
100°
90°
80°
70°


JULY 1-31, 1962
FIG.5-DEVIATION OF SEA SURFACE TEMP.(°F)
FROM JULY 1961 BY 1-DEGREE
SQUARES. SHADED AREAS COLDER
IN 1962.
MEXICO
SOUTH
AMERICA
Guaymas
Alamos
Masatlan
San Blas
C. Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
Le Union
NICARAGUA
Corinto
Managua
Chippertan I
COSTA RICA
PANAMA
Coops I
GALAPAGOS IS
Esmeraldas
C. San Francisco
Guayaquil
Lobitos
P Paita
Matacaballo
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablenaves
Pisco
Chala
Mollendo
Ilo
Salas y Gomez
S. Felixes S. Ambrosio
30°
20°
10°
0°
10°
20°
30°
120°
110°
100°
90°
80°
70


JULY 1-31, 1962
FIG.6-DEVIATION OF SEA SURFACE TEMP. (°F) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1962.
MEXICO
SOUTH AMERICA
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
YUCATAN
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
C. Corrientes
Revilla Gigedo Is
Salina Cruz
Acapulco
Champerico
San Jose
La Union
Corinto
Chipperton I
Cocos I
Guayaquil
Esmeraldas
C. San Francisco
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Mollendo
Ilo
Eten
Malacaballo
Sala y Gomez
S. Felix
S. Ambrosio
30°
20°
10°
0°
10°
20°
30°
120°
110°
100°
90°
80°
70°


Part II, Supplement 1
Sea-surface Temperature °F.,
July 1-15, 1962
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - JULY
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
ERBEN BK.
GUADALUPE I.
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
54
56
58
60
62
64
66
68
70
52




Part II, Supplement 2
Sea-surface Temperature °F.,
July 16-31, 1962
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - JULY
United States
Bureau of Commercial Fisheries
Biological Laboratory
San Diego 6, California
VANCOUVER I.
C. BLANCO
C. MENDOCINO
PT. CONCEPTION
ERBEN BK.
GUADALUPE I.
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
56
58
60
62
64
52
54
56
58
60
62
66
66
70
68
64
68
66
64
62
70
70